

The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Clinical Modification

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As of July 2000, W.H.O. had authorized the publication of ICD-10 versions in 37 languages, with 30 countries having implemented ICD-10 for mortality and/or morbidity applications.

The remainder of the countries were expected to implement ICD-10 by Year 2000.

ICD-10 was implemented for mortality reporting in the United States 1/1/99.

International Statistical Classification of Diseases and Health Related Problems, Tenth Revision (ICD-10)

- Several countries use ICD-10 or a clinical modification in casemix and reimbursement systems
 - **United Kingdom [1995]**
 - **Nordic countries (Denmark, Finland, Iceland, Norway, Sweden) [1994-1997]**
 - **France [1997]**
 - **Australia [1998]**
 - **Belgium [1999]**
 - **Germany [2000]**
 - **Canada [2001]**

ICD-10 Major Changes

ICD-10 represents the broadest scope of any ICD revision to date. Changes include:

- Alphanumeric codes (A00-Z99)
- Restructuring certain chapters/ categories
- Addition of new features
- Expansion of detail (2,033 categories; 855 more than ICD-9)

Expanded Detail in ICD-10

ICD-9-CM

250 Diabetes

- 5th digit “1”
identified juvenile-onset
- 5th digit “0”
identified adult-onset

ICD-10

- E10 Insulin-dependent
- E11 Non-insulin dependent
- E12 Malnutrition-related
- E13 Other specified
- E14 Unspecified

Injuries Restructured

ICD-9

Fractures	800-829
Dislocations	830-839
Sprains/Strains	840-848

ICD-10

Injuries to head	S00-S09
Injuries to neck	S10-S19
Injures to thorax	S20-S29

Expanded Detail in ICD-10

External Causes of Injuries

ICD-9 (E800-E999)

Transport accidents	E800-E848
Intentional self-harm	E950-E959
Complic. med/surg care	E870-E876

ICD-10 (V00-Y98)

Transport accidents	V01-V99
Intentional self-harm	X60-X84
Complic. med/surg care	Y40-Y84

ICD-10 Evaluation Contract

In September 1994 NCHS awarded a contract to the Center for Health Policy Studies (CHPS) to evaluate the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

Contract Findings

- ICD-10 not significantly better than ICD-9-CM for morbidity applications to warrant implementation.
- A clinical modification of the ICD-10 would be a significant improvement and worth implementing.

Why a Clinical Modification ?

- Need to:
 - Expand distinctions for ambulatory and managed care encounters
 - Expand to include new concepts
 - Expand to include emerging diseases and more recent medical knowledge
 - Incorporate changes made to ICD-9-CM since ICD-10 implementation

ICD-10-CM Development

- Three phases of development

Phase 1 -Prototype developed under contract

20 TAP members

Phase 2 - Enhancements by NCHS

C&M minutes, providers & other users

Phase 3 - Further enhancements based on
public comments

22 organizations/individuals

ICD-10-CM Development

- Consultation with:
 - Physician groups
 - Dermatology, Neurology, Orthopedics, Pediatrics, Psychiatry
 - Professional organizations
 - ADA, AHA, AHIMA, ANA, NACHRI
 - Other users of ICD-9-CM
 - federal agencies, Workers Comp, epidemiologists, researchers

ICD-10-CM

Major Modifications

- Addition of sixth character
- Addition of laterality
- Combining dagger/asterisk codes
- Created combination diagnosis / symptoms codes
- Deactivated procedure codes

ICD-10-CM

Major Modifications

[continued]

- Added trimesters to OB codes (fifth-digits from ICD-9-CM will not be used)
- Revised diabetes mellitus codes (5th digits from ICD-9-CM will not be used)
- Expanded codes (e.g., injury, diabetes, postoperative complications, alcohol/substance abuse)
- Added code extensions for injuries and external causes of injuries

Diabetes mellitus

- The common fifth-digit subclassification in ICD-9-CM for diabetes mellitus will not be used in ICD-10-CM
- The diabetes categories have been fully revised to reflect the recent revisions to the classification of diabetes issued by the American Diabetes Association

Diabetes mellitus

ICD-9-CM	ICD-10	ICD-10-CM
250.X 4th digit identifies type of complication 5th digit “1” identified juvenile-onset 5th digit “0” identified adult- onset	E10.X Insulin- dependent E11.X Non-insulin dependent E12 Malnutrition- related E13 Other specified E14 Unspecified 4th digit for type of complication	E08 Diabetes due to underlying condition E09 Drug or chemical induced diabetes E10 Type 1 diabetes E11 Type 2 diabetes E13 Other specified diabetes mellitus E14 Unspecified 4th digit identifies type of complication 5/6th digit for type of complication

Injury codes in ICD-9-CM & ICD-10

Open wounds

- **laceration w/foreign body**
- **laceration w/o foreign body**
- **puncture wound w/foreign body**
- **puncture wound w/o foreign body**
- **bite**

Superficial wounds

- **abrasion**
- **blister**
- **contusion**
- **external constriction**
- **superficial foreign body**
- **insect bite**

ICD-10-CM

Expanded Injury Codes

Detail for open wounds added at 5th digit

S41.01 Laceration of shoulder without
foreign body

S41.02 Laceration of shoulder with
foreign body

S41.03 Puncture wound of shoulder
without foreign body

Postoperative complications

Examples

- G97.3 Hemorrhage or hematoma complicating a nervous system procedure
- H95.3 Accidental puncture or laceration during an ear procedure

Poisoning/External Cause

Combination Codes

- T38.11 Poisoning by thyroid hormones and substitutes, accidental (unintentional)
- T38.12 Poisoning by thyroid hormones and substitutes, intentional self-harm
- T38.13 Poisoning by thyroid hormones and substitutes, assault

Injury & External Cause Chapter Extensions in ICD-10-CM

- a Initial encounter
- d Subsequent encounter
- q Sequelae

Fracture Extensions

- a Initial encounter for closed fracture**
- b Initial encounter for open fracture**
- d Subsequent encounter for fracture with routine healing**
- g Subsequent encounter for fracture with delayed healing**
- j Subsequent encounter for fracture with nonunion**
- q Sequelae**

Place of Occurrence

Y92.0x Home

Y92.1x Residential institution

**Y92.2x School, other institution and public administrative
area**

Y92.3x Sports and athletic area

Y92.4 Street and highway

Y92.5x Trade and service areas

Y92.6 Industrial and construction area

Y92.7 Farm

Y92.8x Other specified place

Activity

- Y93.0x Injured while engaged in sports activity
- Y93.1 Injured while engaged in leisure activity
- Y93.3x Injured while engaged in other types of work
- Y93.4 Injured while resting, sleeping, eating or
engaging in other vital activities
- Y93.8 Injured while engaged in personal hygiene
- Y93.9 Injured during unspecified activity

ICD-10-CM

Status

- ✓ Complete incorporation of public comments
- ✓ Finalize Tabular List revisions
- ✓ Revise Index & Crosswalks
- ✓ Database (Alpha version)
- ☐ Revise guidelines
- ☐ Develop training materials
- ☐ Pre-release testing/Comparability study

Disadvantages of Remaining with ICD-9-CM

- Due to the classification's age (20+ years) and content it is no longer clinically accurate
- ICD-9-CM update process cannot keep pace with changes
- Inability to capture data relating to factors other than disease affecting health
- Non-comparability with State/National mortality data

ICD-10-CM

Benefits of Enhancements

- Comprehensive scope of ICD-10-CM will contribute to:
 - **More relevant data for epidemiological research and decision-support purposes**
 - Patient Safety
 - Ambulatory/managed care encounter
 - Surveillance & prevention activities
 - Outcomes research
 - **Increased sensitivity when making refinements in applications such as grouping and reimbursement methodologies**

ICD-10-CM

Benefits of Enhancements

- Harmonization with DSM IV
- Chapter 2 (Neoplasms) and morphology codes correspond to ICD-O-2 which have been used by cancer registry programs since 1995
- Harmonization (90-95%) with nursing classification (NANDA)

ICD-10-CM

Implementation Issues

- Training:
 - **Will be required for various users at various levels**
 - **Should not require extensive coder retraining**
 - **Structure, conventions, coding rules basically the same**
 - **Some short-term loss of productivity is expected during the learning curve**
- Will require changes to data systems
- Will require changes in data retrieval/analysis

Web Site

NCHS Classification of Diseases:
ICD-9-CM, ICD-10, ICD-10-CM, and ICF

<http://www.cdc.gov/nchs/icd9.htm>